APPENDIX G TYPICAL CONCENTRATIONS OF METALS IN SOILS

TYPICAL CONCENTRATIONS OF METALS IN SOILS PREPARED BY REGION V TAT

CONCENTRATION IN SOILS (mg/kg [ppm])

ELEMENT		RANGE		TYPICAL MEDI	AN SOURCE
Aluminum	Αl	10,000 - 30	0.000	71,000	1
Antimony	Sb	0.2 - 15		6	1, 2
Arsenic	As	0.1 - 19	4	11	3
Barium	Ba	100 - 3,	000	500	1
Beryllium	Вe	0.01 - 40		0.3	1
8oron	В	2 · 27	0	20	1
Bromine	Br	1 - 11	0	10	1
Cadmium	Cd	0.01 - 7		0.5	4
Calcium	Ca	<150 - 50	0,000	24,000	1, 5
Chlorine	Cl	8 - 1,	800	100	1
Chromium	Cr'	5 - 3,	000	100	4
Cobalt	Ço	0.05 - 65		8	1
Copper	Cu	2 - 25	0	30	1
Fluorine	F	6 - 70	70	270	3
Gallium	Ga	2 - 10	0	20	1
Germanium	Ge	0.1 - 50		1	1
Iron	Fe	100 - 55	0,000	40,000	1, 3
Lanthanum	La	2 · 18	0	40	1
Lead	Рb	<1 - 88	3	29	3
Magnesium	Mg	400 - 9,	000	5,000	1
Manganese	Mn	20 - 18	,300	1,000	1, 3
Mercury	Нg	<0.01 - 4.	5	0.09	
Molybdenum	Мо	0.1 - 40		2	1, 4
Nickel	Νī	0.1 - 1,		50	1, 3
Phosphorus	P	35 - 5,		800	1
Potassium	K	80 - 37		14,000	1
Rubidium	Rb	20 - 1,	000	150	1
Scandium	Sc	0.5 - 55		7	1
Selenium	Şe	0.01 - 38		0.4	1, 4
Silicon	Sí	250,000 - 41),000	330,000	1
Silver	Ag	<0.01 - 8		0.4	3
Sodium	Na	150 - 25		5,000	1
Strontium	Sr	<3 - 3,		278	3
Sulfur	S	30 - 1,6		700	1
Thallium	Τl	0.1 - 0.8	}	0.2	1
Thorium	Th	2 - 13		9	6
Tin	\$n	1 - 201		10	1, 4
Titanium	Τi	150 - 25	, 000	5,000	1
Tungsten	W	0.5 - 83		1.5	1
Vanadium	٧	3 - 500		100	1, 4
Yttrium	Y	<10 - 200		40	1, 5
Zinc	Zn	1 - 2,00		90	1, 3
zirconium	Zr	60 - 2,00	10	400	1

- BOWEN, H.J.M., <u>ENVIRONMENTAL CHEMISTRY OF THE ELEMENTS</u>, ACADEMIC PRESS, NEW YORK, PP. 60-61, 1979.
- CONNORS, J.J., SHACKLETTE, H.T., ET AL., "BACKGROUND GEOCHEMISTRY OF SOME ROCKS, SOIL, PLANTS, AND VEGETABLES IN THE CONTERMINOUS UNITED STATES," <u>U.S. GEOLOGICAL SURVEY PROFESSIONAL PAPER</u> 574-F, 1975.
- 3. URE, A. M., ET AL., "ELEMENTAL CONSTITUENTS OF SOILS," ENVIRONMENTAL CHEMISTRY 2:92-204, 1983.
- 4. PARR, J. F.; MARSH, P. B.; KLA, J. M. (EDS.) LAND TREATMENT OF HAZARDOUS WASTES, NOYES DATA CORPORATION, PARK RIDGE, NEW JERSEY, 1983.
- 5. SHACKLETTE, H.T., ET AL., "ELEMENTAL COMPOSITION OF SURFICIAL MATERIAL IN THE CONTERMINOUS UNITED STATES," <u>UNITED STATES GEOLOGICAL SURVEY PROFESSIONAL PAPER</u> 574-D, 1971.
- 6. LECHLER, T.J., ET AL., "MAJOR AND TRACE METAL ANALYSIS OF 12 REFERENCE SOILS BY INDUCTIVELY COUPLED PLASMA-ATOMIC EMISSION SPECTROMETRY." SOIL SCIENCE 130:238-241, 1980.

APPENDIX H PC SHOP WASTE ANALYTICAL RESULTS



WESTON-GULF COAST LABORATORIES, INC.

Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

2417 Bond St., University Park, Illinois 60466

August 3, 1990

Mr. Willy Pua Roy F. Weston, Incorporated 3 Hawthorn Parkway, Suite 400 Vernon Hills, IL 60061

Dear Mr. Pua:

Please find enclosed the analytical reports for the samples submitted to Weston/Gulf Coast laboratories for analyses. The samples were identified as follows:

Project: AT & T/Bell Lab

CLIENT ID	Lab ID	SAMPLE DATE	DATE RECEIVED
AT&T Soil Comp.#1	9006G672-001	06/28/90	06/29/90
AT&T Comp.#1 EPTOX	9006G672-002	06/28/90	06/29/90

If you have any questions, please contact Sheryl Johnson or Kate Caldwell at our laboratories.

Sincerely,

WESTON/GULF COAST LABORATORIES

John Boudreau

Laboratory Manager

Michael J. Healy Project Manager

Mani S. Iyer

Metals Unit Leader

Diane L. Harper

Wet Chemistry Unit Leader

kc

Enclosures

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<u>L</u>				<u> </u>										3 Present on Sample
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WESTON-GULF COAST LABORATORIES, INC.

2417 Bond St., University Park, Illinois 60466

Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

DATA QUALIFIERS

- u Indicates an inorganic compound was analyzed for but not detected.
- U Indicates an organic compound was analyzed for but not detected.
- J Indicates an estimated value for either a TIC or an analyte that meets the identification criteria but the result is less than the specified detection limit.
- B Indicates the compound was found in the blank and the sample.
- Indicates the compound was found in the TCLP extraction blank and the sample.
- E Concentrations exceed calibration range of the instrument.
- I Indicates Interference.
- BS Indicates matrix analyses were conducted on reagent grade water.
- BSD Blank Spike Duplicate
- BDL Below Detection Limit
- MS Matrix Spike
- MSD Matrix Spike Duplicate
- Indicates that surrogate/matrix spike recoveries were not obtained because the extract had to be diluted for analysis.
- DL Indicates a secondary dilution
- NA Not Applicable
- DF Dilution factor
- X Result is by calculation

NOTES:

Solid, sediment and sludge results are reported on a dry weight basis except when analyzed for Landfill disposal parameters (such as incineration or Illinois Green Sheet parameters). All other mg/kg results are reported on an "as received" basis.

Reporting limits are detection limits adjusted for sample size used, dilutions made, and in the case of dry weight results, the moisture content of the sample.



ANALYTICAL REPORT

To: AT & T/Bell Lab

Roy F. Weston, Incorporated 3 Hawthorn Parkway, Suite 400

Vernon Hills, IL 60061

Attn: Mr. Willy Pua

Date: Friday August 3rd, 1990

RE: AT & T Soil Comp. #1

Project # 2400-11-01-0000

Lab ID: 9006G672-001 Sample Date: 06/28/90 Date Received: 06/29/90

Inorganic Client Data Report

	Parameters	Result		Units	Reporting Limit	
<u>_</u> \$	% Ash	92.6		%	0.10	
	% Solids	94.4		%	0.10	
-	Acidity	0.10	u	%	0.10	
	Alkalinity	0.17	****	%	0.10	
	Chlorine	610	u	mg/kg	610	764-6. <u>". 1944-1941 </u>
	Cyanide, Reactive	0.46	u	mg/kg	X 0.46	
	Cyanide, Total	0.48	u	mg/kg	0.48	
	Flash Point	>200	0	DEG F		
	Floatable Solids		" 	NA		- 12 135 - 12 135
	Total Organic Carbon			NA		
	Oil & Grease, Grav.	250	u	mg/kg	250	
	Vol Thru Filter	0.00		ML		
	pH	8.0		рН	+-0.20	
	Phenol	3.0	u	mg/kg	3.0	
	Settleable Solids			NA		
	Sulfide	4.2	u	mg/kg	4.2	
	Sulfide Reactive	4.2	u	mg/kg	4.2	



ANALYTICAL REPORT

To: AT & T/Bell Lab
Roy F. Weston, Incorporated
3 Hawthorn Parkway, Suite 400
Vernon Hills, IL 60061

Attn: Mr. Willy Pua

Date: Friday August 3rd, 1990

RE: AT & T Soil Comp. #1
Project # 2400-11-01-0000
Lab ID: 9006G672-001
Sample Date: 06/28/90
Date Received: 06/29/90

Inorganic Client Data Report

Parameters	Result		Units	Reporting Limit
Total Organic Halogen	613	u	mg/kg	613
Silver, Total	3.2	u	mg/kg	3.2
Arsenic, Total	3.6		mg/kg	1.7
Barium, Total	11.4		mg/kg	5.3
Cadmium, Total	0.42	u	mg/kg	0.42
Chromium, Total	118		mg/kg	2.1
Copper, Total	344		mg/kg	2.1
Mercury, Total	0.093	u	mg/kg	0.093
Nickel, Total	4.8		mg/kg	2.1
Lead, Total	16.2		mg/kg	5.3
Selenium, Total	0.84	u	mg/kg	0.84
Zinc, Total	20.8		mg/kg	1.1
		-		



ROY F. WESTON BANNOCKBURN. IL.

November 8, 1990

WESTON-GULF COAST LABORATORIES, INC.

Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

2417 Bond St., University Park, Illinois 60466

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Mr. Steve Bosko Roy F. Weston, Incorporated 3 Hawthorn Parkway, Suite 400 Vernon Hills, IL 60061

Dear Mr. Bosko:

Please find enclosed the analytical reports for the samples submitted to Weston/Gulf Coast Laboratories for analyses. They were identified as follows:

Project: AT & T/Bell Lab

CLIENT ID	LAB ID#	SAMPLE DATE	DATE RECEIVED
AT&T Comp. Soil #2	9010G764-001	10/04/90	10/04/90
AT&T Comp. #2 TCLP	9010G764-002	10/04/90	10/04/90
AT&T Comp. #2 TCLV	9010G764-003	10/04/90	10/04/90

As part of the laboratory's routine quality control program. this sample was selected to be duplicated and spiked during sulfite analysis. No sulfite was detected in either duplicate. The matrix spike resulted in 31.5% recovery. When repeated, it resulted in 34.0% recovery. Although no acceptance criteria have been established for matrix spikes in this specific matrix, the low recoveries do indicate an interference may be present. All other wet chemistry quality control was within acceptance limits.

If you have any questions, please contact Jodie Bracken at our laboratories.

Sincerely,

WESTON/GULF COAST LABORATORIES

John Boudreau

Laboratory Manager

Jeff A. Kaczinski GC/MS Unit Leader

Mani S. Iyer Metals Unit Leader Jane D. Huber Project Manager

Linda S. Mackley Organic Unit Leader

Diane L. Harper

Wet Chemistry Unit Leader

jvb

Enclosures



WESTON-GULF COAST LABORATORIES, INC.

2417 Bond St., University Park, Illinois 60466

Phones: (312) 534-5200 (219) 885-7077 (815) 723-7533

DATA QUALIFIERS

- u Indicates an inorganic compound was analyzed for but not detected.
- Indicates an organic compound was analyzed for but not detected.
- J Indicates an estimated value for either a TIC or an analyte that meets the identification criteria but the result is less than the specified detection limit.
- B Indicates the compound was found in the blank and the sample.
- Indicates the compound was found in the TCLP extraction blank and the sample.
- E Concentrations exceed calibration range of the instrument.
- I Indicates Interference.
- BS Indicates matrix analyses were conducted on reagent grade water.
- BSD Blank Spike Duplicate
- BDL Below Detection Limit
- MS Matrix Spike
- MSD Matrix Spike Duplicate
- D Indicates that surrogate/matrix spike recoveries were not obtained because the extract had to be diluted for analysis.
- DL Indicates a secondary dilution
- NA Not Applicable
- DF Dilution factor
- X Result is by calculation

NOTES:

Solid, sediment and sludge results are reported on a dry weight basis except when analyzed for Landfill disposal parameters (such as incineration or Illinois Green Sheet parameters). All other mg/kg results are reported on an "as received" basis.

Reporting limits are detection limits adjusted for sample size used, dilutions made, and in the case of dry weight results, the moisture content of the sample.

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RFW 21-21-001/A-12/88

7-115



ANALYTICAL REPORT

To: AT & T/Bell Lab

Roy F. Weston, Incorporated 3 Hawthorn Parkway, Suite 400 Vernon Hills, IL 60061

Attn: Mr. Steve Bosko

Date: Thursday November 8th, 1990

RE: AT&T Comp. Soil #2 Project # 2400-11-01-0000 Lab ID: 9010G764-001 Sample Date: 10/04/90 Date Received: 10/04/90

Inorganic Client Data Report

	Parameters	Result	Units	Reporting Limit
	% Moisture	7.7	%	0.10
	% Solids	92.3	%	0.10
·	Total Organic Carbon	14800	mg/kg	1080
	Vol Thru Filter	0.00	ML/100G	
	Reactivity to Water	NEGATIVE		
	Sulfite	39.2 u	mg/kg	39.2
	Specific Gravity	1.76		
		The second secon		
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ANALYTICAL REPORT

TO: AT & T/Bell Lab

Roy F. Weston, Incorporated 3 Hawthorne Parkway, Suite 400 Vernon Hills, IL 60061

Attn: Mr. Steve Bosko

Date: October 23, 1990

Re: AT&T Comp. Soil #2 Project # 2400-11-01-0000

Lab ID: 9010G764-001 Sample Date: 10/04/90 Date Received: 10/04/90

Units: UG/KG

ORGANIC CLIENT DATA REPORT

		Detection	;	
Compound	Result	Limit	Flag	
Methylene Chloride	110	40	В	
Acetone	920	130	В	
Carbon Disulfide	BDL	2200	U	
Trichlorofluoromethane	680	520		
Ethyl Ether	BDL	10	U	
1,1,2-Trichlorotrifluorethane	110	50		
Methyl Ethyl Ketone (MEK)	BDL	65	U	
1,1,1-Trichloroethane	BDL	30	U	
Ethyl Acetate	BDL	40	U	
Isobutanol	BDL	250	U	
1,1,2-Trichloroethane	BDL	100	U	
Carbon Tetrachloride	BDL	100	U	
2-Nitropropane	BDL	50	U	
n-Butanol	BDL	500	U	
Trichloroethylene	BDL	40	U	
Benzene	BDL	5	U	
Cyclohexanone	BDL	400	U	



ANALYTICAL REPORT

TO: AT & T/Bell Lab

Roy F. Weston, Incorporated 3 Hawthorne Parkway, Suite 400

Vernon Hills, IL 60061

Attn: Mr. Steve Bosko

Date: October 23, 1990

Re: AT&T Comp. Soil #2 Project # 2400-11-01-0000

Lab ID: 9010G764-001 Sample Date: 10/04/90 Date Received: 10/04/90

Units: UG/KG

ORGANIC CLIENT DATA REPORT

Compound	Result	Detection Limit	n Flag	
Methyl Isobutyl Ketone (MIBK)	BDL	25	U	
Tetrachloroethylene	BDL	30	U	
Toluene	BDL	5	U	
Chlorobenzene	BDL	10	U	
Ethylbenzene	BDL	10	U	
m-Xylene	BDL	15	U	
o,p-Xylene	BDL	15	U	
Nitrobenzene	BDL	550	U	
1,2 Dichlorobenzene	BDL	50	U	
Methanol	BDL	2200	U	
2-Ethoxyethanol	BDL	21000	U	
Pyridine	BDL	110	U	
o-Cresol	BDL	40	U	
m-Cresol	BDL	40	U	
p-Cresol	BDL	40	U	



ANALYTICAL REPORT

To: AT & T/Bell Lab

Roy F. Weston, Incorporated 3 Hawthorn Parkway, Suite 400 Vernon Hills, IL 60061

Attn: Mr. Steve Bosko

Date: Friday October 12th, 1990

RE: AT&T Comp. Soil #2 Project # 2400-11-01-0000

Lab ID: 9010G764-001 Sample Date: 10/04/90 Date Received: 10/04/90

Units: UG/KG

PCBs by GC

	Detection					
Compound	Result	Limit	Flag			
Aroclor-1016	BDL	85	U			
Aroclor-1221	BDL	85	U			
Aroclor-1232	BDL	85	U			
Aroclor-1242	BDL	85	U			
Aroclor-1248	BDL	85	U			
Aroclor-1254	BDL	170	U			
Aroclor-1260	BDL	170	U			

		······································				
		· ·		<u></u>		



ANALYTICAL REPORT

To: AT & T/Bell Lab
Roy F. Weston, Incorporated
3 Hawthorn Parkway, Suite 400
Vernon Hills, IL 60061

Attn: Mr. Steve Bosko

Date: Thursday November 8th, 1990

RE: AT&T Comp. #2 TCLP

Project # 2400-11-01-0000 Lab ID: 9010G764-002 Sample Date: 10/04/90 Date Received: 10/04/90

Inorganic Client Data Report

Parameters	Result	Units	Reporting Limit
 Silver, TCLP Leachate	0.030 u	mg/L	0.030
Arsenic, TCLP Leachate	0.016 u	mg/L	0.016
 Barium, TCLP Leachate	0.30	mg/L	0.050
 Cadmium, TCLP Leachate	0.0040 u	mg/L	0.0040
 Chromium, TCLP Leachate	0.13	mg/L	0.020
Copper, TCLP Leachate	5.3	mg/L	0.020
Mercury, TCLP Leachate	0.00020 u	mg/L	0.00020
 Nickel, TCLP Leachate	0.11	mg/L	0.020
 Lead, TCLP Leachate	0.063	mg/L	0.050
 Selenium, TCLP Leachate	0.040 u	mg/L	0.040
Zinc, TCLP Leachate	3.3	mg/L	0.010
·			



WESTON-GULF COAST LABORATORIES, INC. 2417 Bond St., University Park, Illinois 60466

Phones: (708) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: AT & T/Bell Lab

Roy F. Weston, Incorporated 3 Hawthorn Parkway, Suite 400 Vernon Hills, IL 60061

Attn: Mr. Steve Bosko

Date: Tuesday October 23rd, 1990

RE: AT&T Comp. #2 TCLV

Project # 2400-11-01-0000 Lab ID: 9010G764-003

Sample Date: 10/04/90 Date Received: 10/04/90

Units: UG/L

VOLATILES BY GC/MS, TCLP LEACHATE

	Volatile Compound	Result	Detection Limit	ı Flag	
	Vinyl Chloride	BDL	10	U	III TORRAMANAMAN
	1,1-Dichloroethene	BDL	5	U	
	Chloroform	9	5	T	
	1,2-Dichloroethane	BDL	5	U	
	Carbon Tetrachloride	BDL	5	U	
	2-Butanone	BDL	10	U	
	Trichloroethene	BDL	5	U	
	Benzene	BDL	5	U	177 200 100 100 100
	Tetrachloroethene	BDL	5	U	
_	Ch1orobenzene	BDL	5	U	
_					



ANALYTICAL REPORT

TO: AT & T/Bell Lab

Roy F. Weston, Incorporated 3 Hawthorne Parkway, Suite 400 Vernon Hills, IL 60061

Attn: Mr. Steve Bosko

Date: October 23, 1990

Re: Method Blank

Project # 2400-11-01-0000 Lab ID: 9010G764 Blank Sample Date: 10/04/90 Date Received: 10/04/90

Units: UG/KG

ORGANIC CLIENT DATA REPORT

	Compound	Result	Detection Limit	Flag	
	Methylene Chloride	20	40	J	
	Acetone	120	130	J	
	Carbon Disulfide	BDL	2200	U	
	Trichlorofluoromethane	BDL	520	U	
	Ethyl Ether	BDL	10	U	
-	1,1,2-Trichlorotrifluorethane	BDL	50	U	
	Methyl Ethyl Ketone (MEK)	BDL	65	U	
	1,1,1-Trichloroethane	BDL	30	U	
	Ethyl Acetate	BDL	40	U	
	Isobutanol	BDL	250	U	
	1,1,2-Trichloroethane	BDL	100	U	egen er a
	Carbon Tetrachloride	BDL	100	U	
÷	2-Nitropropane	BDL	50	Ü	
	n-Butanol	BDL	500	U	
	Trichloroethylene	BDL	40	U	
	Benzene	BDL	5	U	
	Cyclohexanone	BDL	400	Ü	



WESTON-GULF COAST LABORATORIES, INC. 2417 Bond St., University Park, Illinois 60466

Phones: (708) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

TO: AT & T/Bell Lab

Roy F. Weston, Incorporated 3 Hawthorne Parkway, Suite 400 Vernon Hills, IL 60061

Attn: Mr. Steve Bosko

Date: October 23, 1990

Re: Method Blank

Project # 2400-11-01-0000 Lab ID: 9010G764 Blank Sample Date: 10/04/90 Date Received: 10/04/90

Units: UG/KG

ORGANIC CLIENT DATA REPORT

Compound	Result	Detectio Limit	n Flag	
Methyl Isobutyl Ketone (MIBK)	BDL	25	U	
Tetrachloroethylene	BDL	30	U	
Toluene	BDL	5	U	
Chlorobenzene	BDL	10	U	
Ethylbenzene	BDL	10	U	
m-Xylene	BDL	15	U	
o,p-Xylene	BDL	15	U	
Nitrobenzene	BDL	550	U	
1,2 Dichlorobenzene	BDL	50	V	
Methanol	BDL	2200	U	
2-Ethoxyethanol	BDL	2200	U	
Pyridine	BDL	110	U	
o-Cresol	140	40		
m-Cresol	BDL	40	U	
p-Cresol	BDL	40	U	

WESTON	Analytics Use Only	Cust	tody T	rans	fer Red	ord/l	_ab V	Vork	Requ	uest		WAS THE REAL PROPERTY.
911	136751		Refr	igerator#		·						WESTON Analytics
	T DELL INDICATA		#/Ty	pe Contai	ner Supra							Use Only Samples Were:
	T BELL LABOLATON		Volu	me								1 Shipped or Hand
	2400-11-01	_	Pres	ervative	T cir							Delivered
)210 HeC'd	3.8.71 Date	Due		LYSES	Memb	104.						NOTES:
irw Contaci Lient Contec	ct/Phone	Comments of the second of the	REQ	JESTED	METHO	ର ନଧ୍ୟ						2 Ambient or Chilled
VA Use Only Lab ID		Description	Matri	Data	ated .					•		NOTES: 3 Received Broken/
200 15	ATHT COMPOSITE	ru #2 .	. S				_				+	Leaking (Improperly
	CORPORATE LANGUE LA CORPORTATION DE LA CORPORTATION	10114	- 3									Sealed)
												NOTES:
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	· · · · · · · · · · · · · · · · · · ·											1 Y() N
		*	_									NOTES:
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trix: Soil - Sediment - Solid	W - Water DS - Drum S O - Oil DL - Drum L A - Alr F - Fish WI - Wipe L - EP/TCLF	iquids	Speci	al Instruc		s where earn, I					•	4 Unbroken on Sample NOTES: Y
Item/Reason	Relinguished by	Received by			tem/Reason	Relingui	shed by	Receiv	red by	Date	Time	COC Record Was: 1 Present Upon Receil
	STONE R. Beest	I Syrakly	3/4/1	i_{c} : h				****				of Samples Y
										 		Discrepancies Between
14 T	· ···		 									Sample Labels and CO Record? Y
415			 					· · · · · · · · · · · · · · · · · · ·				NOTES:
		···										

Roy F. Weston, Inc. - Gulf Coast Laboratories INORGANIC ANALYTICAL DATA PACKAGE FOR AT & T/Bell Lab

LABORATORY CHRONICLE DATE RECEIVED: 03/08/91			A) (x i/beii	RFW LOT # :9103G751			
CLIENT ID /AN	ALYSIS	RFW #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS	
AT&T Composit % SOLIDS _AB QC:	e #3	001	S	91GTS096	03/08/91	03/11/91	03/11/91	
% SOLIDS		MB1	, W	91GTS096	N/A	03/11/91	03/11/91	
GNATURE	Dian	I. Ha	<u>pu</u>			DATE 3-	-17-91	



ANALYTICAL REPORT

To: AT & T/Bell Lab
Roy F. Weston, Incorporated
3 Hawthorn Parkway, Suite 400
Vernon Hills, IL 60061

Attn: Mr. Steve Bosko

Date: Wednesday March 13th, 1991

RE: AT&T Composite #3

Project # 2400-11-01-0000

Lab ID: 9103G751-001 Sample Date: 03/08/91 Date Received: 03/08/91

Inorganic Client Data Report

	arameters	Result	Units	Reporting Limit	
%	Solids	91.6	%	0.10	g , u
				0 0 v s	
					7 9
				N N N N N N N N N N N N N N N N N N N	
				× 2 = ×	16.00



ANALYTICAL REPORT

To: AT & T/Bell Lab
Roy F. Weston, Incorporated
3 Hawthorn Parkway, Suite 400
Vernon Hills, IL 60061

Attn: Mr. Steve Bosko

Date: Wednesday March 13th, 1991

Project # 2400-11-01-0000 Lab Batch: 9103G751

Inorganic Method Blank Data Report

	Sample	Lab ID	Parameter	Result	Units	Reporting Limit
	Blank 1	91GTS096-MB1	% Solids	0.10 u	%	0.10
						Y 4
7		= 2				
**************************************					erin i kiraya Tira resi	
weig 3						P 19
		2 " n' e n				. *
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197				The second second		



Roy F. Weston, Inc. - Gulf Coast Laboratories VOA ANALYTICAL DATA PACKAGE FOR AT & T/Bell Lab

LABORAT	ORY	CHRONI	CLE
DATE	DECE	TVED.	10/0

DATE RECEIVED: 10/04/90

RFW LOT # :9010G764

CLIENT ID	RFW #	MTX	PREP #	COLLECTION	EXTR/PRE	P ANALYSIS
AT&T Comp. #2 TCLV AT&T Comp. #2 TCLV AT&T Comp. #2 TCLV	003 003 MS 003 MSD	W W W	90GVB378 90GVB378 90GVB378	10/04/90 10/04/90 10/04/90	N/A N/A N/A	10/16/90 10/16/90 10/16/90
LAB QC:				9		F
VBLK VBLK VBLK	238 MB1 MB1 BS	W W W	90GVB378 90GVB378 90GVB378	N/A N/A N/A	N/A N/A N/A	10/16/90 10/16/90 10/17/90
SIGNATURE JAGO	. Kagin	de	-		_ DATE	4-2-91



April 2, 1991

Mr. Steve Bosko
Roy F. Weston, Inc.
3 Hawthorn Parkway, Suite 400
Vernon Hills, IL 60061

Dear Mr. Bosko:

Please find enclosed the analytical report for the samples submitted to Weston/Gulf Coast Laboratories for analysis. They were identified as follows:

PROJECT NAME: AT & T Bell Lab

RFW#:

9010G764

9103G751

If you have any questions, please contact our laboratories.

Sincerely,

WESTON/GULF COAST LABORATORIES

Jane D. Huber Project Manager

sj

Enclosures



ANALYTICAL REPORT

To: AT & T/Bell Lab

Roy F. Weston, Incorporated 3 Hawthorn Parkway, Suite 400 Vernon Hills, IL 60061

Attn: Mr. Steve Bosko

Date: March 26, 1991

Re: AT&T Composite #3

Project # 2400-11-01-0000 Lab ID: 9103G751-001 Sample Date: 03/08/91 Date Received: 03/08/91

Units: UG/KG

Organic Client Data Report

	Detection
Compound	Result Limit Flag
Methanol	1000 630 B
1	
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	2 To
ń	



ANALYTICAL REPORT

To: AT & T/Bell Lab

Roy F. Weston, Incorporated 3 Hawthorn Parkway, Suite 400 Vernon Hills, IL 60061

Attn: Mr. Steve Bosko

Date: March 26, 1991

Re: Method Blank

Project # 2400-11-01-0000

Lab ID: 9103G751-MB Units: UG/KG

Organic Client Data Report

Methanol 530 610 J		Compound	Result	Detection Limit	Flag
		Methano1	530	610	J
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	-			- Andrew June	
	_				
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		8	-	-	
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WESTON-GULF COAST LABORATORIES, INC. 2417 Bond St., University Park, Illinois 60466

Phones: (708) 534-5200 (219) 885-7077 (815) 723-7533

DATA QUALIFIERS

- Indicates an inorganic compound was analyzed for but not detected.
- U Indicates an organic compound was analyzed for but not detected.
- J Indicates an estimated value for either a TIC or an analyte that meets the identification criteria but the result is less than the specified detection limit.
- B Indicates the compound was found in the blank and the sample.
- Indicates the compound was found in the TCLP extraction blank and the sample.
- E Concentrations exceed calibration range of the instrument.
- I Indicates Interference.
- BS Indicates matrix analyses were conducted on reagent grade water.
- BSD Blank Spike Duplicate
- BDL Below Detection Limit
- MS Matrix Spike
- MSD Matrix Spike Duplicate
- Indicates that surrogate/matrix spike recoveries were not obtained because the extract had to be diluted for analysis.
- DL Indicates a secondary dilution
- NA Not Applicable
- DF Dilution factor
- X Result is by calculation

NOTES:

Solid, sediment and sludge results are reported on a dry weight basis except when analyzed for Landfill disposal parameters (such as incineration or Illinois Green Sheet parameters). All other mg/kg results are reported on an "as received" basis.

Reporting limits are detection limits adjusted for sample size used, dilutions made, and in the case of dry weight results, the moisture content of the sample.



ANALYTICAL REPORT

To: AT & T/Bell Lab

Roy F. Weston, Incorporated 3 Hawthorn Parkway, Suite 400 Vernon Hills, IL 60061

Attn: Mr. Steve Bosko

Date: Tuesday April 2nd, 1991

RE: AT&T Comp. #2 TCLV

Project # 2400-11-01-0000

Lab ID: 9010G764-003 Sample Date: 10/04/90 Date Received: 10/04/90

Units: UG/L

VOLATILES BY GC/MS, TCLP LEACHATE

Vinyl Chloride BDL 10 U 1,1-Dichloroethene BDL 5 U Chloroform 9 5 B 1,2-Dichloroethane BDL 5 U Carbon Tetrachloride BDL 5 U 2-Butanone BDL 10 U Trichloroethene BDL 5 U Benzene BDL 5 U Tetrachloroethene BDL 5 U	
Chloroform 9 5 B 1,2-Dichloroethane BDL 5 U Carbon Tetrachloride BDL 5 U 2-Butanone BDL 10 U Trichloroethene BDL 5 U Benzene BDL 5 U	at .
1,2-Dichloroethane BDL 5 U Carbon Tetrachloride BDL 5 U 2-Butanone BDL 10 U Trichloroethene BDL 5 U Benzene BDL 5 U	
Carbon Tetrachloride BDL 5 U 2-Butanone BDL 10 U Trichloroethene BDL 5 U Benzene BDL 5 U	
2-Butanone BDL 10 U Trichloroethene BDL 5 U Benzene BDL 5 U	
Trichloroethene BDL 5 U Benzene BDL 5 U	
Benzene BDL 5 U	
Tetrachloroethene BDL 5 U	
	10
Chlorobenzene BDL 5 U	
Acetone BDL 10 U	



WESTON-GULF COAST LABORATORIES, INC. 2417 Bond St., University Park, Illinois 60466

Phones: (708) 534-5200 (219) 885-7077 (815) 723-7533

October 10, 1991

Mr. Steve Bosko Roy F. Weston, Incorporated 3 Hawthorn Parkway, Suite 400 Vernon Hills, IL 60061

Dear Mr. Bosko:

Please find enclosed the analytical reports for the samples submitted to Weston/Gulf Coast Laboratories for analyses. They were identified as follows:

PROJECT: AT & T BELL LAB

RFW#:

9109G593

The TCLP results have been bias corrected as specified in the June 29, 1990 Federal Register. The bias correcting procedure requires analyzing each sample twice, once as extracted and once with the extract spiked with all TCLP compounds. The percent recovery of the spike sample is then used as the correction factor for the original sample extracts concentration. Analyses which are already above the hazardous limit are not bias corrected.

Note: the bias correction calculations are performed after the generation of the raw data. Therefore, the final reported result may not match the raw concentration in the instrument data.

If you have any questions, please contact our laboratories.

Sincerely,

WESTON/GULF COAST LABORATORIES

Michael J. Heally

Laboratory Manager

Jane D. Huber

Project Manager

sj

Enclosures

WESTERN

DATA QUALIFIERS

- B Indicates the compound was found in the blank and the sample.
- E Concentrations exceed calibration range of the instrument.
- I Indicates Interference.
- J Indicates an estimated value for either a TIC or an analyte that meets the identification criteria but the result is less than the specified detection limit.
- T Indicates the compound was found in the TCLP extraction blank and the sample.
- u Indicates an inorganic compound was analyzed for but not detected.
- U Indicates an organic compound was analyzed for but not detected.
- BS Indicates matrix analyses were conducted on reagent grade water.
- BSD Blank Spike Duplicate
- BDL Below Detection Limit
- Indicates that surrogate/matrix spike recoveries were not obtained because the extract had to be diluted for analysis.
- DL Indicates a secondary dilution
- DF Dilution factor
- LCS Laboratory Control Sample
- MB Method Blank
- MS Matrix Spike
- MSD Matrix Spike Duplicate
- NA Not Applicable
- X Result is by calculation

NOTES:

Solid, sediment and sludge results are reported on a dry weight basis except when analyzed for Landfill disposal parameters (such as incineration or Illinois Green Sheet parameters). All other mg/kg results are reported on an "as received" basis.

Reporting limits are detection limits adjusted for sample size used, dilutions made, and in the case of dry weight results, the moisture content of the sample.

WESTON	Analytics Use Only	Custo	dy Tr	ansfer	Red	corc	I/La	b V	Vork	Red	ques	t	WESTON
91	096593		Refrige										WESTON Analytics Use Only
Client AT*	T BELL LABORATORIES		#/Type	Container	By E OZ		-	-	7			-	Samples Were:
Work Order <u>2400-11-01</u>			/						\vdash			Shipped or Hand-	
Date Rec'd	Date Due		Preserv	Preservative		ice ice	ICE	7 (1)				NOTES: FED EX	
	51EVEN BOSLO EVPhone (708) 918-4000		_ ANALY		TOLP ALETCA (9240)	TOLP WENTED (STO)	TIMAL HETI (8015)	ANOL					2 Ambient or Chilled NOTES:
WA Use Only Lab ID	Client ID/Descr	iption	Matrix	Date Collected		0001-7							3 Received Broken/
001	51 - PC 5 HOP SOIL DISP	OSAL	5	9-16-91	X								Leaking (Improperly
C03	52- PC SHOP SOIL DIS	POSAL	5			X							Sealed)
005	53 - PC SHOP SOIL DE	SPOSAL	5	1			X						NOTES:
												_	4 Properly Preserved
	25			12				8					NOTES:
:													5 Received Within
		1											Holding Times
				MA.			14						NOTES:
	*												COC Tape Was:
	NUMBER OF STREET												1 Present on Outer
					7								Package Y N 2 Unbroken on Outer
											1		Package (Y) N
													3 Present on Sample
- Soil E - Sediment	W - Water DS - Drum Solids O - Oil DL - Drum Liquids A - Air F - Fish WI - Wipe L - EP/TCLP Leaci			Instructions:	STAN	D TUI	SUAR	0000	חחו	ī.	alo mein	WOL 0.75	4 Unbroken on Sample NOTES: Y N
O - 30110	WI- WIPE L- LF/TOLF Lead	DELE	CHON LIF	TITS; ACETO	3HE - 1	1	21 K ' 10	IN KUDE	MECHIC		.3/4/10	mg).	COC Record Was:
Item/Reason	Steven R. Broken Fer	. Ex. 9/	16/91	me Item/Ro	eason	Relin	quishe	ed by	Rec	eived by	Date	Time	1 Present Upon Receipt of Samples Y N
	4.	Druded 71	10/10/10)3)	107					112.5			Discrepancies Between
,		. 0			4					***************************************	+		Sample Labels and COC Record? Y N NOTES:
											+	+	HOTES.

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Roy F. Weston, Inc. - Gulf Coast Laboratories INORGANIC ANALYTICAL DATA PACKAGE FOR AT & T/Bell Lab

ABORATORY CHRONICLE DATE RECEIVED: 09/17	/91		u 1/0011 i		RFW LOT # :9)109G593
CLIENT ID /ANALYSIS	RFW #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
3 -4			6 			
S1-PC Shop Soil Disp						
TCLP LEACHATE	001	S		09/16/91		09/23/91
S2-PC Shop Soil Disp						
TCLP	003	S		09/16/91		09/19/91
S3-PC Shop Soil Disp						
% SOLIDS	005	S	91GTS379	09/16/91	09/24/91	09/24/91
LAB QC:						
% SOLIDS	MB1	W	91GTS379	N/A	09/24/91	09/24/91
SIGNATURE Dian	vd. Ha	Q.	<u>'. </u>		DATE 9	-30-91



ANALYTICAL REPORT

To: AT & T/Bell Lab
Roy F. Weston, Incorporated
3 Hawthorn Parkway, Suite 400
Vernon Hills, IL 60061

Attn: Mr. Steve Bosko

Date: Friday September 27th, 1991

RE: S3-PC Shop Soil Disp Project # 2400-11-01-0000 Lab ID: 9109G593-005 Sample Date: 09/16/91 Date Received: 09/17/91

Inorganic Client Data Report

Parameters	Result	Units	Reporting Limit
% Solids	92.1	%	0.10



Reporting

ANALYTICAL REPORT

To: AT & T/Bell Lab
Roy F. Weston, Incorporated
3 Hawthorn Parkway, Suite 400
Vernon Hills, IL 60061

Attn: Mr. Steve Bosko

Date: Friday September 27th, 1991

Project # 2400-11-01-0000

Lab Batch: 9109G593

Inorganic Method Blank Data Report

	Sample	Lab ID	Parameter	Result	Units	Limit
	Blank 1	91GTS379-MB1	% Solids	0.10	1 %	0.10
	¥					
0.			u - sa estada estados			
-1					Way S	
e #2						
TI NOVE						H ", " 1940
	Section 186					



Roy F. Weston, Inc. - Gulf Coast Laboratories
VOA ANALYTICAL DATA PACKAGE FOR
AT & T/Bell Lab

ABORATORY CHRONICLE

DATE RECEIVED: 09/17/91

RFW LOT # :9109G593

CLIENT ID		RFW	#	MTX	PREP #	COLLECTION	EXTR/PRE	P ANALYSIS
	Disp.TCLV Disp.TCLV	002 002	MS	W	91GVE244 91GVE244	09/16/91 09/16/91	N/A N/A	10/01/91 10/01/91
LAB QC:								
VBLK		585		W	91GVE244	N/A	N/A	10/01/91
VBLK VBLK		MB1 MB1	BS	W	91GVE244 91GVE244	N/A N/A	N/A N/A	10/01/91 10/01/91
	7.0	h	ر بـ	_	1.			
SIGNATURE_	4	<u>a.</u>	Kayı	us	li		DATE	10-4-91



WESTON-GULF COAST LABORATORIES, INC. 2417 Bond St., University Park, Illinois 60466

Phones: (708) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: AT & T/Bell Lab
Roy F. Weston, Incorporated
3 Hawthorn Parkway, Suite 400
Vernon Hills, IL 60061

Attn: Mr. Steve Bosko

Date: Friday October 4th, 1991

RE: S1-PC Shop Disp.TCLV

Project # 2400-11-01-0000 Lab ID: 9109G593-002

Sample Date: 09/16/91 Date Received: 09/17/91

Units: UG/L

VOLATILES BY GC/MS, TCLP LEACHATE

	Volatile Compound	Result	Reporting Limit	Flag	
	Acetone	BDL	200	U	
	·				
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1					



Roy F. Weston, Inc. - Gulf Coast Laboratories BNA ANALYTICAL DATA PACKAGE FOR AT & T/Bell Lab

ABORAT	ORY	CHRONI	CLE	
DATE	RECE	IVED:	09/17/91	

RFW LOT # :9109G593

	DATE RECEIVE	D: 09/1//	31				•	/IM FOI II	1010010
	CLIENT ID		RFW	#	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
	S2-PC Shop D S2-PC Shop D		004 004	MS	W W	91GB0425 91GB0425	09/16/91 09/16/91	09/20/91 09/20/91	09/25/91 09/25/91
L	AB QC:								
	SBLK SBLK SBLK SBLK SBLK		MB1 TC1 TC2 TC3 TC4		W W W W	91GB0425 91GB0425 91GB0425 91GB0425 91GB0425	N/A N/A N/A N/A	09/20/91 09/20/91 09/20/91 09/20/91 09/20/91	09/25/91 09/25/91 09/25/91 09/25/91 09/25/91
	C*GNATURE_	Al	Ia	. Ka) cir	sh.		DATE/	0-1-91



WESTON-GULF COAST LABORATORIES, INC. 2417 Bond St., University Park, Illinois 60466

Phones: (708) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

To: AT & T/Bell Lab

Roy F. Weston, Incorporated 3 Hawthorn Parkway, Suite 400 Vernon Hills, IL 60061

Attn: Mr. Steve Bosko

Date: Tuesday October 1st, 1991

RE: S2-PC Shop Disp.TCLP

Project # 2400-11-01-0000 Lab ID: 9109G593-004 Sample Date: 09/16/91 Date Received: 09/17/91

Units: UG/L

SEMIVOLATILES BY GC/MS, TCLP LEACHATE

F	Semivolatile Compound	Result	Reporting Limit	Flag		
2	1,4-Dichlorobenzene	BDL	91	U	4	
	ortho-cresol	BDL	140	U		
	meta & para-cresol	BDL	190	U	l _g	
	Hexachloroethane	BDL	160	U		110
	Nitrobenzene	BDL	39	U		
	Hexachlorobutadiene	BDL	160	U		
1 VI	2,4,6-Trichlorophenol	BDL	60	U	<i>ii</i>	
	2,4,5-Trichlorophenol	BDL	91	U		
	2,4-Dinitrotoluene	BDL	30	U		
9	Hexachlorobenzene	BDL	26	U		
	Pentachlorophenol	BDL	68	U		
	Pyridine	BDL	1300	U		

WESTERN

Roy F. Weston, Inc. - Gulf Coast Laboratories 8015 ANALYTICAL DATA PACKAGE FOR AT & T/Bell Lab

ABORATORY CHRONICLE DATE RECEIVED: 09/17	//91	, .	RFW LOT # :9109G593	
CLIENT ID	RFW #	MTX	COLLECTION EXTR/PREP	
S3-PC Shop Soil Disp	005	<u> </u>	09/16/91 N/A	
SIGNATURE Luda	S. Ma	ckley	DATE 10-9-91	



WESTON-GULF COAST LABORATORIES, INC. 2417 Bond St., University Park, Illinois 60466

Phones: (708) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

TO: AT & T/Bell Lab

Roy F. Weston, Incorporated 3 Hawthorn Parkway, Suite 400

Vernon Hills, IL 60061

Attn: Mr. Patrick Ries

Date: October 9, 1991

Re: S3-PC Soil Disp

Project # 2400-11-01-0000

Lab ID: 9109G593-005 Sample Date: 09/16/91 Date Received: 09/17/91

Units: MG/KG

ORGANIC CLIENT DATA REPORT

 Compound	Result	Limit Flag	
Methanol (BDL	0.75 ป	
			Section 1986

APPENDIX I

PC SHOP MANIFEST AND WASTE PROFILE SHEET

(NDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF SOLID AND HAZARDOUS WASTE MANAGEMENT P.O. Box 7035 Indianapolis, IN 46207-7035

PLEASE PRINT OR TYPE	PE (Form designed for	r use on elite (12-pitch) typewi	riter.) /	orm Approve	ed. OMB No.	2050-0)39. Expires 9-30- 9
UNIFORM HAZARI WASTE MANIFE		US EPA ID No. 6 · 8 · 6 · 0 · 8 · 3 · 1 · 4 (Manifest Document No. D • () • () •	2. Page 1 of 1	1 Informa not req items D State la	tion in the uired by F. Han	ne shaded areas is r Federal law, but d l are required by
3. Generator's Name and Mailin AT & T Bell Lab 2000 North Nape Naperville, IL	ing Address ooratories rville Road 60566			A. State I	Manifest Docu 055 Generator's IC	ument Nu 598	mber
Generator's Phone (708 Transporter 1 Company Name	979-4649	6. Use EPA ID Number			8050004 Transporter's		
Ozinga Transpor 7. Transporter 2 Company Nam		I · L · D · 9 · 8 · 2 · 0 · 6	5 · 7 · 1 · 7 · °	2.1	orter's Phone Fransporter's	(70	8) 388-6257
					orter's Phone		
 Designated Facility Name as Chemical Waste 1 		10. Use EPA ID Number		G. State	Facility's ID		
Indiana, Inc. 4636 Adams Cent Fort Wayne, IN	er Road	I·N·D·0·7·8·9·	1 - 1 - 1 - 4 -	H. Facility	s Phone () 447-5	5585	
11. US DOT Description (Includin			12. Contain	ers	13. Totai uantity	14. Unit Wt/Vol.	l. Waste No.
R.Q. Hazardous V	Waste, Solid, N.O	0.S.	0.0.1	. M <i>0.0</i>	.0.0.8	Y	F001,F002 F003,F004 F005,F006
b.							
С.							
d.				•	• • •		
						1	
J. Additional Descriptions for Materi		7091	к	. Handling Co	des for Wast	tes Listed	Above
Work Order # 2446 F001, F002, F000	81; Profile # K17 3, F004, F005, F0	006			· · · · · · · · · · · · · · · · · · ·	tes Listed	Above
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EPA Form 8700-22 Previous editions are obsolete. State Form 11865 (R/4-89)

	Rubeyeas	ar, rue.	<u>K17981</u>
	WASTE PROFILE		Profile #
(_) Check here if this is a Recertification	LOCATION OF ORIGINAL CWM of I	ndiana, Inc.	
LNERAL INFORMATION			
1. Gunorator Nama: A T & T BELL LABORATORIES	Generator USEPA	ID: <u>ILD0G8608314</u>	
2. Generator Address: 2000 NORTH NAPERVILLE ROAD	Billing Address	: CLEARING DISPOSAL	
	(_) Same	3800 S. LARANIE A	VF
NAPERVILLE IL 605667033		Anna At Basicanism 1	
- Tochnical			
. Alternate	08/979-4649 Billing	CICERO	IL 60650
Contact/Phone:	Contact/Phone:	Matt Hern:	andez
PROPERTIES AND COMPOSITION Procuss Generating Waste: HAZARDOUS SOIL/CENTRE	TE/Deuris		
. Wasto Namo: SPILL CLEANUP			
A. Is this a USEPA hazardous waste (40 CFR Part	261)7 Yes (X) No (_)		
B. Identify ALL USEPA lieted and characteristic	wasto code numbers (D,F,K,F,U)		
			Same as USEPA Codes
Physical State 6 70F: A. Solid (X) Liquid (_)	Both (\underline{x}) B. Single Layer (\underline{x})	Multilayer (_) C. Fx	oo liq. rango to
A. pH: Ranga 7.0 to 10.0 or Not applicable (_)	B. Strong Odor (_);describe		
0.Liquid Flack Point: < 73F (_) 73-99F (_) 100-	139F (_) 140-199F () >= 200)P (X) W.A. () Close	t t que roor (X) cue t
1. CHEMICAL COMPOSITION: List ALL constituents (-
Constituents	Rango Unite	meant in any concentra	ition and forward analynis
SOIL	96 to 97 %		
CONCRETE			
		-	
DEBRIS	0 to 1 •	-	
	to	-	
	to	•	
	to	_	
TOTAL COMPOSITION (MUST EQUAL OR EXCEED 100%):		•	
R. OTHER: PCBs if yos, concentration Redicactive () Benzame if yes, concent Carcinogen () Infectious () Other	ppm, PCBs rogulated by 40 ppm.) CFR 761 (_). Pyrophe Shock Sensitive (_) O	oric (_) Explosive (_)
3. If waate subject to the land ban & meets treat	went standards, check hore:	& supply analytical re	sults whose applicable.
HPPING INFORMATION - PACKAGING: Bulk Bolid (<u>X</u>) Bulk Liquid (_) Dr:	um () Typo/Sizo: CUBIC YARDS	Other	
3. ANTICIPATED ANNUAL VOLUME: 5 Unite:			
AMPLING INFORMATION		Sample	Tracking Number: 0006264
a. Sample source (drum, lagoon, pond, tank, vat,			
Date Sampled:Sampler's Name/Company			
b. Generator's Agent Supervising Samplings		j 17. (內) No sample rec	uired (See instructions.)
WERATOR'S CERTIFICATION roby cortify that all information submitted in wanto. Any sample submitted is representative worth information regarding known or suspected is to obtain a sample from any wagts shipment for	as defined in 40 CFR 261 \sim Aparaxes in the possession of t purposes of recentification.	pendix I or by using a he generator has been	n equivalent method. All disclosed. I authorize
) famile 4. Nows	Patrick M. Don	Jd, Enve Mr.	Mt. SDec. /2-20-
Signature		Name and Title	Date

CLOSURE DOCUMENTATION REPORT

for

RCRA CLOSURE OF THE NON-ACTIVE CONTAINERIZED WASTE STORAGE BUILDING (BLOCK HOUSE)

at

AT&T BELL LABORATORIES
INDIAN HILL FACILITY
2000 NORTH NAPERVILLE ROAD
NAPERVILLE, ILLINOIS 60566

Prepared by:

MAECORP Incorporated 155 North Wacker Drive Suite 400 Chicago, IL 60606

MAECORP Report Number IL-7050

Dale Montgomery, P.E.

Ill. Reg. Prof. Engineer

#62-34101



TABLE OF CONTENTS

- I. Narrative and Chronological Summary of Closure Activities
- II. Estimated Block House Closure Cost Summary

Figures

Figure 1 - Property Location

Figure 2 - Site Plan

Figure 3 - Block House Design Drawing

Appendices

- A. Photo Documentation
- B. Laboratory Data
- C. Waste Manifest and Bill of Lading

NARRATIVE AND CHRONOLOGICAL SUMMARY OF CLOSURE ACTIVITIES

I. NARRATIVE AND CHRONOLOGICAL SUMMARY OF CLOSURE ACTIVITIES

MAECORP Incorporated was contracted by AT&T Bell Laboratories (Indian Hill) to carry out the clean closure and closure certification of the non-active containerized waste storage building (block house), per the approved IEPA closure plan, at AT&T's Naperville, Illinois, facility. (See Figure 1 - Property Location and Figure 2 - Site Plan.)

After preparing a site health and safety plan, MAECORP mobilized on site July 6, 1989. MAECORP personnel included a response manager and two cleanup technicians. A MAECORP Illinois registered professional engineer was present to ensure the closure activities followed the approved IEPA closure plan. All MAECORP field personnel had previously received a minimum of 40 hours of safety and health training off site, plus a minimum of at least three days of actual field experience under the direct supervision of a trained and experienced supervisor. Additionally, as required, the on-site supervisor had completed at least eight additional hours of specialized training on managing RECEIVED hazardous waste operations and had several years of previous NOV 1 - 1989 experience in the field.

MAECORP began by visually inspecting the conditions of the concrete surfaces of the floor and walls (see Appendix A - Photo Documentation).

Next, the 30 passive vents were covered with visqueen sheeting and duct tape. Any observed solid residue (almost none)

adhering to the concrete surfaces was scraped and scrubbed off and collected in a 55-gallon drum.

The concrete surfaces inside the building were steam-cleaned, starting at the top and working downward. Next, the surfaces were triple-rinsed with a 2,500-psi pressure washer supplied with a Quisol surfactant solution. All rinsewater was collected with a wet-dry vacuum and deposited in the same drum as the scraped residue. A grey steel cabinet remaining in the block house was also decontaminated in the same manner.

A one-quart glass jar grab sample of the rinsewater was taken by the MAECORP Response Manager from the partially filled, 55-gallon drum according to MAECORP standard sampling procedures; and, after delivery by MAECORP, was analyzed by Tenco Laboratories of Schererville, Indiana. The results are shown in Appendix B - Laboratory Data.

The disposable Level "C" and then "D" personal protective equipment was removed and deposited in another 55-gallon drum. Both partially filled drums of waste were sealed and placed in temporary storage in the permanent AT&T RCRA active containerized waste storage building (prefabricated steel building) located next to the block house.

After the surface cleaning, it was observed that some greenblue stains had appeared on the floor. A scraping sample was taken of the material, and it was found to be no more than a surface stain. It was also noted that a very small surface crack had appeared that was not evident before cleaning.

After consultation, a decision was made to attempt removal of the stains and to determine if the crack was significant enough to notify the IEPA.

On July 20, 1989, the same MAECORP response manager, an Illinois registered professional engineer and two cleanup technicians, returned to the site. A mild acidic solution of water and hydrochloric acid was used as a floor wash. The area was rinsed twice, then rinsed with a mild baking soda and water solution, and then rinsed again with water. All of the rinsewater was collected with a wet-dry vacuum and put into another 55-gallon drum. After sampling the second partially filled drum of rinsewater, this drum was also placed in storage in the permanent RCRA drum container storage building next door. The disposable Level "C" and then "D" personal protective equipment was placed in the partially filled drum of same from July 6.

As expected, it was observed that the green-blue stains had been removed. The crack was closely examined and, after chipping away 1.5 to 2 inches, the crack appeared to end. There is no reason to believe any subsurface contamination could have occurred. The plans (see Figure 3 - Block House Design Drawing) show the concrete floor to be a minimum 6 inches thick with 4 x 4 x 4 woven wire mesh reinforcing wire at about 2 to 3 inches, tapering to a 1-foot concrete floor under all the walls of the

building with #5 steel reinforcing bars. Thus, no notice was given to the IEPA of these minor cracks until this closure certification because, per the closure plan approval letter, NO cracks, joints, or other defects were found that would allow waste to migrate through the concrete into the underlying soil in the opinion of both AT&T Bell Laboratories' Professional Engineer and MAECORP's independent professional engineer.

After MAECORP learned that the July 21 rinsate sample was not delivered to the laboratory as required because it was mistakenly believed by the MAECORP response manager to be unnecessary, another sample was taken of the second drum of rinsate, on August 9, 1989, to replace the discarded sample.

Laboratory tests on the two rinsate samples were run by Tenco Laboratories for TOX, F001, F002, F005, flash point, corrosivity, reactivity, and EP toxicity per requirements of the approved closure plan. The results are shown on the analysis sheets in Appendix B - Laboratory Data. The specific methods from U.S EPA's SW-846 Test Methods are shown in Table 1 - Laboratory Test Methods.

TABLE 1
LABORATORY TEST METHODS

<u>Parameters</u>	Method No.
pH Flashpoint Sulfide T & R Cyanide T & R TOX F Code Solvent	9045 1010 9030 9010 9020 8010 8015 8020
EP Tox Arsenic Barium Cadmium Chromium Mercury Lead Selenium Silver	7060 7080 7130 7190 7470 7420 7740 7760

After the laboratory analyses had shown both rinsates to be non-hazardous, disposal arrangements were made.

On August 31, 1989, all three drums of waste were picked up from the active containerized storage building and delivered directly to the disposal facility by Metropolitan Environmental Company, a licensed special waste hauler. The one, 55-gallon drum of personal protective equipment was delivered directly to Land & Lakes Landfill of 1220 South 138 Street, Chicago, Illinois, by straight bill of lading. The two partially filled, 55-gallon drums of rinsate were delivered directly as a non-hazardous special waste via Illinois manifest IL4140570 to Chem-Clear of 11800 South Stoney Island Avenue, Chicago, Illinois 60617. Copies of the waste manifest and bill of lading are enclosed in Appendix C - Waste Manifest and Bill of Lading.

ESTIMATED BLOCK HOUSE CLOSURE COST SUMMARY

II. ESTIMATED BLOCK HOUSE CLOSURE COST SUMMARY*

Removal of Hazardous Wastes at Closure	*Undetermined
July 6, 1989, Decontamination	\$2,820.00
Sample Handling and Delivery	\$130.00
July 20, 1989, Stain Removal	\$1,880.00
August 9, 1989, Resampling of Drum #2 Rinsate	-0-
Laboratory Analysis of Two Samples of Rinsate	\$1,410.00
Disposal Acceptance Fees for Two Drums of Rinsate (\$420.00 each)	\$840.00
August 31, 1989, Transportation and Disposal	\$792.00
August 31, 1989, MAECORP Assistance in Disposal	\$226.00
Preparation of Closure Certification Report (includes some P.E. inspection of activities)	\$995.00
Miscellaneous (photographs, delivery, copies, etc.)	\$250.00
BLOCK HOUSE PARTIAL CLOSURE COST	\$9,343.00

^{*} Based on estimated costs for MAECORP Incorporated (not final).

FIGURE 1
PROPERTY LOCATION

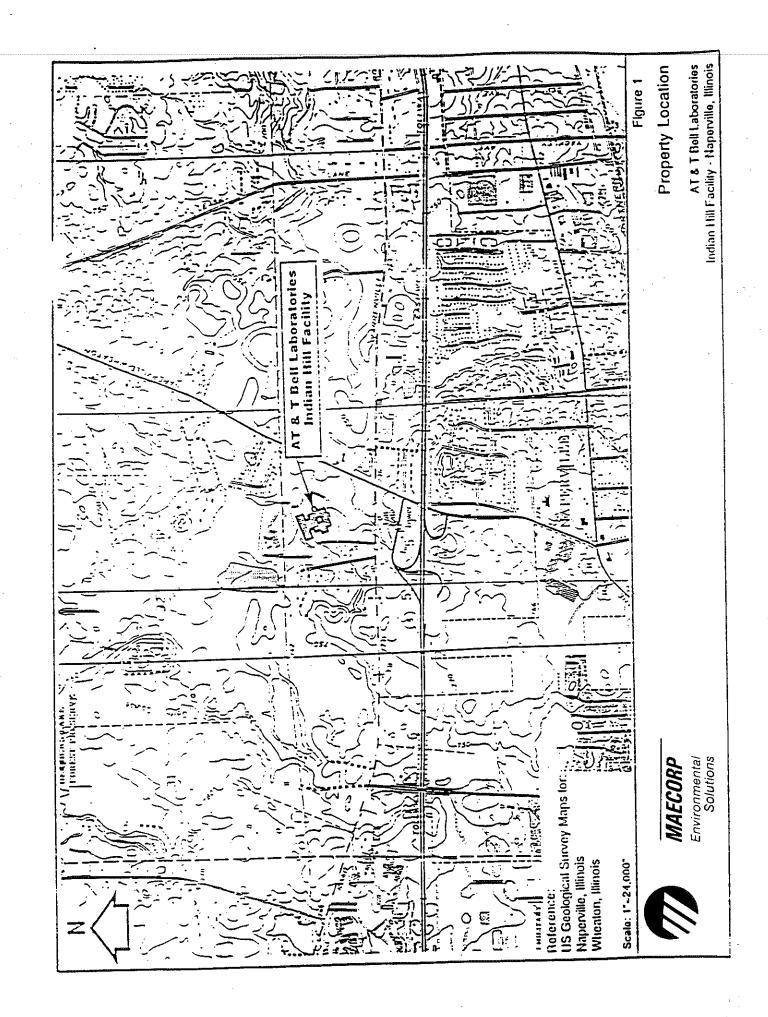


FIGURE 2

SITE PLAN

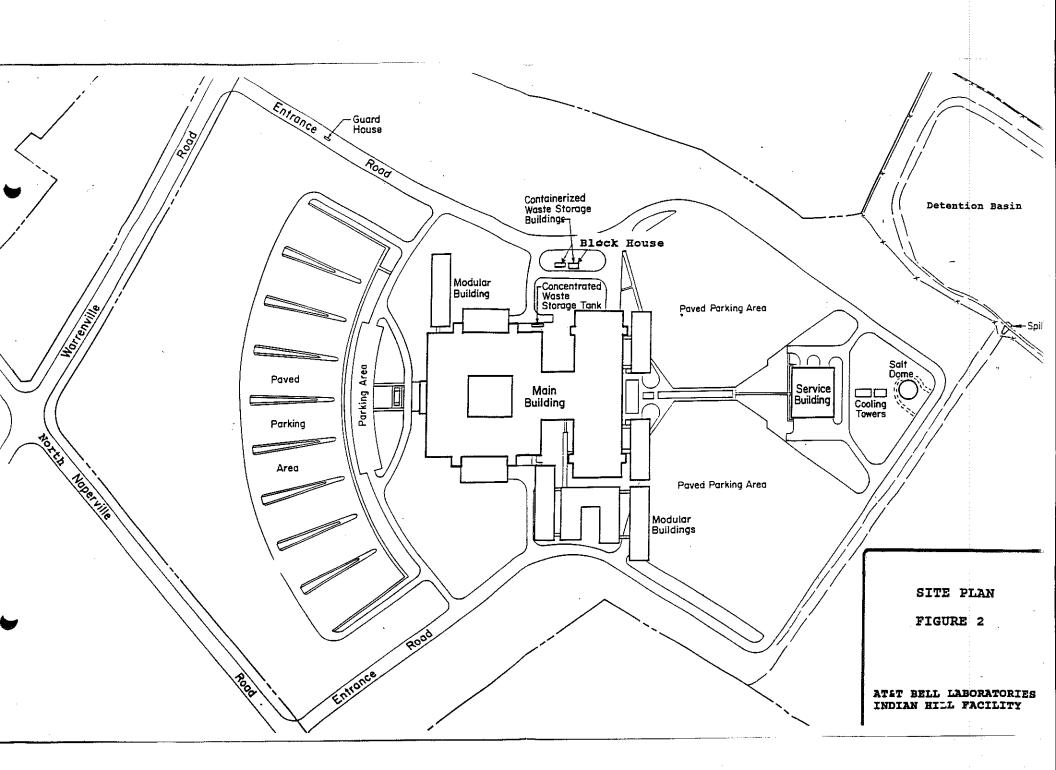


FIGURE 3 BLOCK HOUSE DESIGN DRAWING